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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,505	06/14/2001	Bipul Binit Sinha	oracle01.016	7778

25247   7590   09/18/2003

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EXAMINER
LEROUX, ETIENNE PIERRE

ART UNIT	PAPER NUMBER
2171	

DATE MAILED: 09/18/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/881,505	Applicant(s) SINHA ET AL.	
	Examiner Etienne P LeRoux	Art Unit 2171	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-10* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-10* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *14 June 2001* is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

　　If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a) ☐ All b) ☐ Some * c) ☐ None of:

　　　　1. ☐ Certified copies of the priority documents have been received.

　　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

　　　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
　　　　　　application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

　　a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)	4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) ☐ Notice of Informal Patent Application (PTO-152)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) ☐ Other: .

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No

5,335,343 issued to Lampson et al (hereafter Lampson '343).

Claim 1:

Lampson '343 discloses a method of ensuring that a first component of a distributed system

that normally has access to certain messages from other components thereof is additionally

aware of a state of one or more of the other components that is relevant to an action performed

by the first component, the method comprising the step practiced in the first component of:

- receiving augmented ones of the certain messages, each of the augmented certain

  messages having been augmented by an other component to additionally contain

  information indicating the relevant state of the other component [commit directive,

  prepare message to cohorts, Fig 20, 27 and 28]

- for at least some of the other components, retaining the relevant state from an augmented

  message of the other component, and performing the action as determined by the retained

  relevant state [abort log record, col 13, lines 45-58]

Claim 2:

Lampson '343 discloses the messages are part of a transaction, the action belongs to the

first component's portion of a protocol for ensuring that the results of the transaction are

consistent in the components, in the step of receiving augmented ones of the certain messages,

the information indicating the relevant state indicates whether the transaction will modify data in

the other component, and in the step of performing the action, the first component optimizes the

protocol as determined by the retained state [col 5, lines 30-50].

Claim 3:

Lampson '343 discloses the protocol is a two-phase commit protocol,

the first component is the coordinator for the protocol, and in the step of performing the action,

the first component sends a message that aborts the transaction to an other component when the

other component's state indicates that the transaction does not modify the data in the other

component [col 5, lines 50-63 and Fig 5].

Claim 4:

Lampson '343 discloses the distributed system is a distributed database system and the

components are database systems therein [Figs 1 and 2].

Claim 5:

Lampson '343 discloses a method of ensuring that a first component of a distributed system

that normally accesses messages that belong to a transaction and that are received from other

components thereof is additionally aware of a state of one or more of the other components that

is relevant to the transaction, the method comprising the steps practiced in the other component

of:

- determining the relevant state [col 2, lines 36-53], and

- augmenting certain of the messages sent in the course of the transaction with state

    information indicating the relevant state of the other component, the first component

    determining an action to be taken with regard to the transaction from the state information

    [col 2, lines 48-53]

Claim 6:

Lampson '343 discloses the relevant state indicates whether the transaction will modify

data in the other component [col 2, lines 18-25]

Claim 7:

Lampson '343 discloses the protocol is a two-phase commit protocol, and the other

component receives an abort message of the protocol when the relevant state indicates that the

transaction will not modify the data in the other component [col 4, lines 33-40]

Claim 8:

Lampson '343 discloses the distributed system is a distributed database system and the

components are database systems therein [Fig 1]

Claim 9:

Lampson '343 discloses a method of executing a two-phase commit protocol for a

transaction, the transaction involving a coordinator and a cohort and the method comprising the

performed in the coordinator of :

receiving a message required for the transaction from the cohort, the message being augmented

with sate information indicating whether the transaction modifies the cohort's data, retaining the

state information for the cohort, and if the state information for the cohort indicates that the

transaction does not modify the cohort, sending an abort message of the two-phase commit to the

cohort [col 13, lines 45-60].

Claim 10:

Lampson '343 discloses a method of executing a two-phase commit protocol for a

transaction, the transaction involving a coordinator and a cohort and the method comprising the

steps performed in the cohort of:

augmenting a message that the cohort sends to the coordinator as part of the transaction with

state information indicating whether the transaction will modify the cohort, and responding to

messages received from the coordinator as required by the commit protocol, the coordinator

sending a message of the commit protocol to the cohort as determined by the state information

[col 14, lines 11-20]

3.   Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No

5,917,998 issued to Cabrera et al (hereafter Cabrera '998).

Claim 1:

Cabrera '998 discloses a method of ensuring that a first component of a distributed system

that normally has access to certain messages from other components thereof is additionally

aware of a state of one or more of the other components that is relevant to an action performed

by the first component, the method comprising the step practiced in the first component of:

- receiving augmented ones of the certain messages, each of the augmented certain

  messages having been augmented by an other component to additionally contain

  information indicating the relevant state of the other component [col 7, lines 16-22]

- for at least some of the other components, retaining the relevant state from an augmented
  message of the other component, and performing the action as determined by the retained
  relevant state [col 7, lines 5-15 and Fig 6]

Claim 2:

Cabrera '998 discloses the messages are part of a transaction, the action belongs to the

first component's portion of a protocol for ensuring that the results of the transaction are

consistent in the components, in the step of receiving augmented ones of the certain messages,

the information indicating the relevant state indicates whether the transaction will modify data in

the other component, and in the step of performing the action, the first component optimizes the

protocol as determined by the retained state [col 4, lines 36-50]

Claim 3:

Cabrera '998 discloses the protocol is a two-phase commit protocol,

the first component is the coordinator for the protocol, and in the step of performing the action,

the first component sends a message that aborts the transaction to an other component when the

other component's state indicates that the transaction does not modify the data in the other

component [Fig 2 and col 5, lines 1-10]

Claim 4:

Cabrera '998 discloses the distributed system is a distributed database system and the

components are database systems therein [Fig 1]

4.   Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No

5,452,445 issued to Hallmark et al (hereafter Hallmark '445).

Claim 1:

Hallmark '445 discloses a method of ensuring that a first component of a distributed system

that normally has access to certain messages from other components thereof is additionally

aware of a state of one or more of the other components that is relevant to an action performed

by the first component, the method comprising the step practiced in the first component of:

- receiving augmented ones of the certain messages, each of the augmented certain

    messages having been augmented by an other component to additionally contain

    information indicating the relevant state of the other component [distributed query, col 7,

    lines 29-35]

- for at least some of the other components, retaining the relevant state from an augmented

    message of the other component, and performing the action as determined by the retained

    relevant state [col 7, lines 37-41]

Claim 2:

Hallmark '445 discloses the messages are part of a transaction, the action belongs to the

first component's portion of a protocol for ensuring that the results of the transaction are

consistent in the components, in the step of receiving augmented ones of the certain messages,

the information indicating the relevant state indicates whether the transaction will modify data in

the other component, and in the step of performing the action, the first component optimizes the

protocol as determined by the retained state [col 8, lines 1-22]

Claim 3:

Hallmark '445 discloses the protocol is a two-phase commit protocol,

the first component is the coordinator for the protocol, and in the step of performing the action,

the first component sends a message that aborts the transaction to an other component when the

other component's state indicates that the transaction does not modify the data in the other

component [abstract]

Claim 4:

Hallmark '445 discloses the distributed system is a distributed database system and the

components are database systems therein [Fig 1]

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Etienne LeRoux whose telephone number is (703) 305-0620.

The examiner can normally be reached on Monday – Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Safet Metjahic, can be reached on (703) 308-1436.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-3900.

Etienne LeRoux

September 9, 2003

SAFET METJAHIC
SUPERVISORY PATENT EXAMINER
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